

# **DESAIN ALAT PENGUPAS KULIT ARI KEDELAI MENGUNAKAN AUTODESK INVENTOR**

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## **ABSTRACT**

*The high demand for tempeh in Indonesia highlights the need for more efficient soybean processing, especially the skin peeling stage, which is still done manually in many small industries. This study aims to design a mechanical soybean skin peeler using Autodesk Inventor to improve efficiency, reduce labor, and optimize production. The tool uses a hollow steel frame, aluminum plates, rubber separators, and peeling rollers, with a 5 kg capacity.*

*Design validation was conducted through expert questionnaires and stress analysis simulations. Results showed that the structure is safe, with stress levels below material limits and a safety factor within acceptable standards. Expert feedback rated the design as "Good" with a 77% approval score. The proposed design is suitable for small-scale industries and can enhance productivity and ease of maintenance.*

**Keywords** : *Soybean peeler, Autodesk Inventor, design, stress analysis, automation*